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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/826,911

04/19/2004

Tetsuya Hasebe

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10/16/2007

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EXAMINER

CHEUNG, VICTOR

ART UNIT

PAPER NUMBER

3714

MAIL DATE

DELIVERY MODE

10/16/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/826,911

Applicant(s)

HASEBE ET AL.

Examiner

Victor Cheung

Art Unit

3714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date See Continuation Sheet.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :04/19/2004, 12/20/2005, 03/19/2007.

DETAILED ACTION

Claim Objections

1. Claim 2 is objected to because of the following informality:

- Claim 2, Line 5: "partially" should be removed.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 6-8 and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re Claim 6: In the paragraph beginning "evaluating knowledge...", it is unclear as to how the correct answer output signal is to be output in response to inputting of the input signal in the circuit, as this is assuming the output signal to be the correct answer output signal already.

Additionally, the output in response to inputting of the input signal in the circuit is the supplied answer output signal. It is suggested that it read as --comparison result between a correct answer output signal and the supplied answer output signal--.

Re Claims 8 and 11: It is unclear how the correct answer output signal can include correspondence between an input signal, an output signal, and one or more skills required to

Art Unit: 3714

generate the output signal, and how, then, the correspondence output signal is to be compared to the supplied answer output signal in claim 6, which does not include anything but an output signal.

Claim 7 is rejected as being dependent on claim 6.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1, 12, and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Arnou (US Patent 6,434,738).

Re Claims 1 and 12: Arnou discloses a method of determining one or more skills of a user as a design engineer by using a skill determination server (Fig. 1, Ref. 1000) and a skill determination client (Fig. 1, Ref. 1200) connected via a network (Fig. 1, Ref. 1100), comprising the steps of supplying a question file to determine the one or more skills of the user (Fig. 2, Ref. 2200), providing one or more answers to the question file and supplying an answer file (Fig. 2, Ref. 2300), and evaluating the knowledge of the user based on a comparison result between the answer file and a correct answer file corresponding to the question file (Fig. 2, Ref. 2500) and determining the one or more skills of the user as a design engineer (Fig. 2, Ref. 2600). (Col. 3, Line 52-Col. 5, Line 22).

Re Claim 15: Arnow discloses a skill determination server including a question file supply part (Col. 4, Lines 22-25) and a skill determination part (Col. 5, Lines 4-9).

6. Claim 18 is rejected under 35 U.S.C. 102(e) as being anticipated by Carter (US Patent 6,785,872).

Re Claim 18: Carter discloses a skill determination client including an interface part and an answer file supply part supplying an answer file to a skill determination board (Fig. 1, Ref. 105).

Regarding the limitations regarding the question file (lines 9-13, "in response to..."), an intended use of the claimed invention must result in a structural difference between the claimed inventions to carry patentable weight.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 2-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arnow (US Patent 6,434,738) in view of Lawman et al. (6,324,672).

Re Claim 2: Arnou additionally discloses the method including submitting fragments of source code to be inserted into a full source code for testing (Col. 4, Lines 37-40).

However, Arnou does not specifically disclose circuit design specifications.

Lawman et al. disclose a method of configuring a circuit over a communications link.

Lawman et al. also disclose that it is well known in the art to configure circuits through forms, blank spaces, tables, and by editing hardware description language codes (Col. 2, Line 17-Col. 3, Line 14).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the server and client method of Arnou to determine the skill of a user in circuit design, thereby providing a remote method of configuring and testing a circuit design. The method of Arnou provides a method for testing over a network, and it would have been obvious to substitute the computer programming code for a circuit programming code.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include source code with blank spaces such that the user is only required to fill in the blanks of key code fragments and not be required to fully submit long lines of code, saving time and energy.

Re Claim 3: Arnou discloses that there is a correspondence between the one or more correct answers to be input in the one or more empty spaces in the source code and one or more skills required to input the one or more correct answers (Abstract).

Re Claim 4: Arnou discloses the method of claim 1 above.

Art Unit: 3714

However, Arnou does not specifically disclose a circuit design specification, a source code, and a netlist generated by conducting logic combination on the source code.

Lawman et al. disclose a method of configuring a circuit over a communications link. Lawman et al. also disclose that it is well known in the art to edit hardware description language code (Col. 2, Lines 56-59), and that data is commonly processed into a netlist (Col. 1, Lines 33-51).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the server and client method of Arnou to determine the skill of a user in circuit design, thereby providing a remote method of configuring and testing a circuit design. The method of Arnou provides a method for testing over a network, and it would have been obvious to substitute the computer programming code for a circuit programming code.

Re Claim 5: Arnou discloses that output signals may be used to determine the correctness of a solution (Col. 5, Lines 4-9).

9. Claims 6-11, 13-14, and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arnou (US Patent 6,434,738) in view of Lawman et al. (6,324,672) and Carter (US Patent 6,785,872).

Re Claims 6 and 13: Note that claim 6 includes the method steps of supplying, providing, and evaluating, as discussed above in claims 1 and 5, and additionally includes limitations to a skill determination evaluation board and the steps of configuring and supplying.

Arnou discloses that the output of the answer file may be compared to an expected output (Col. 5, Lines 4-9).

Art Unit: 3714

Arnow does not specifically disclose a skill determination evaluation board.

Lawman et al. disclose that such steps are used to program circuits (Col. 6, Lines 33-36).

Carter discloses an evaluation board that is configured with circuit specifications (Fig. 1, Ref. 106).

Examiner takes OFFICIAL NOTICE that the step of supplying an input signal to conduct logic verification on a circuit to be compared to an output signal is old and well known in the art of circuit design.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a physical evaluation board and circuit, the physical board and circuit being the ultimate end result of any circuit specification, thereby providing a real-world result that can be tested with real-world variables and physics that may not be available in a simulation.

Re Claims 7 and 8: The use of netlists, hardware description language, and comparing outputs has already been discussed with respect to claims 4 and 5 above.

Re Claims 9 and 14: Note that claim 9 includes the method steps of supplying, providing, configuring, supplying, and evaluating, as discussed in claim 6 above, and additionally includes the limitation of supplying a comparison result.

Arnow discloses comparing an output with an expected output and supplying a result (Col. 5, Lines 4-19).

Re Claims 10 and 11: The use of netlists, hardware description language, and comparing outputs has already been discussed with respect to claims 4, 5, 7, and 8 above.

Re Claims 16 and 17: Arnow discloses a skill determination server including a question file supply part (Col. 4, Lines 22-25) and a skill determination part evaluating knowledge between an output and an expected output (Col. 5, Lines 4-9). Arnow discloses an input signal supply part for supplying an input (Col. 7, Line 49-Col. 8, Line 15).

However, Arnow does not specifically disclose a circuit or a skill determination evaluation board.

Lawman et al. disclose a method of configuring a circuit over a communications link. (Col. 2, Line 17-Col. 3, Line 14).

Carter discloses an evaluation board that is configured with circuit specifications (Fig. 1, Ref. 106).

Examiner takes OFFICIAL NOTICE that the step of supplying an input signal to conduct logic verification on a circuit to be compared to an output signal is old and well known in the art of circuit design.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a physical evaluation board and circuit, the physical board and circuit being the ultimate end result of any circuit specification, thereby providing a real-world result that can be tested with real-world variables and physics that may not be available in a simulation. By testing the circuit, it can be verified if the circuit is correct.

10. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Carter (US Patent 6,785,872) in view of Jenkins, IV (US Patent 6,020,757).

Re Claim 19: Carter discloses a circuit generation part (Fig. 1, Ref. 105-107).

However, Carter does not disclose any buffers.

Jenkins discloses a programmable device including a plurality of input and output buffers (Abstract).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include an input signal buffer and an output signal buffer, thereby providing a temporary memory for the signal data and allowing for a proper rate of transfer to the signal destination.

11. Claims 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carter (US Patent 6,785,872) in view of Patrie et al. (US Patent 6,539,508).

Re Claims 19-20: Carter discloses a circuit generation part (Fig. 1, Ref. 105-107).

However, Carter does not disclose buffers or a comparison part.

Patrie et al. disclose that programmable devices include a plurality of input and output buffers (Col. 1, Lines 14-29). Patrie et al. disclose a comparator used to test input and output resources (Col. 9, Lines 63-65).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include an input signal buffer and an output signal buffer, thereby providing a temporary memory for the signal data and allowing for a proper rate of transfer to the signal destination. It would have been obvious to include a comparator such that the memory and overall functionality of the circuit can be tested onboard.

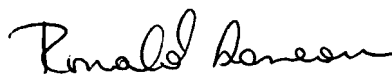
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor Cheung whose telephone number is (571) 270-1349. The examiner can normally be reached on Mon-Fri, 9-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pezzuto can be reached on (571) 272-6996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

VC
Victor Cheung
October 10, 2007


RONALD LANEAU
PRIMARY EXAMINER

10/11/07